

Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraph number [0131] with the following rewritten paragraph:

[0131] 2,7-Dihydroxynaphthalene, 3.2 g (20 mmole), potassium carbonate, 2.9 g (21 mmole), dimethylsulfoxide, 50 mL and toluene, 25 mL were added with stirring to an flask equipped with a distillation column under an argon atmosphere. The mixture was then heated to 130°C. and kept at this temperature for four hours to azeotropically distill off the water with toluene in the system. After standing to cool, dipotassium 4,4'-difluorodiphenylsulfone-3,3'-disulfonate, 2.45 g (5 mmole), 4,4'-difluorodiphenylsulfone, 3.81 g (15 mmole) and toluene, 10 mL-were added to the mixture, which was heated to 170°C. to distill off the toluene and continue the reaction for 8 hours. After standing to cool, a large quantity of hydrochloric acid was added dropwise to the mixture to form a precipitate, which was filtered to recover. Water washing and filtering of the precipitate were the repeated until the washing liquor became neutral. The precipitate was dried under vacuum to yield 7.82 g of the polymer electrolyte. High resolution NMR analysis of this compound confirmed the structure described above. The subscript in the sulfonic acid group indicates the average number of substitution in the sulfonic acid group. The results in the measurements of various physical properties for this polymer are given below. The permeability coefficient for methanol is given in **Table 2** ~~Table 4~~.

Please replace paragraph number [0168] with the following rewritten paragraph:

[0168] The results for the measurement of various physical properties for this polymer are shown below. The permeation coefficient for methanol is given in **Table 2** ~~Table 4~~.

Please replace paragraph number [0197] with the following rewritten paragraph:

[0197] 2,7-Dihydroxynaphthalene, 1.60 g (10 mmole), bisphenol A, 2.28 g (10.0 mmole), potassium carbonate, 2.90 g (21 mmole), dimethylsulfoxide, 50 mL and toluene, 50 mL were added with stirring to a flask equipped with a distillation column under an argon atmosphere.

The mixture was then heated to 128°C. and kept at this temperature for four hours to azeotropically distil off the water with toluene in the system. After standing to cool, dipotassium 4,4-difluorodiphenylsulfone-3,3'-disulfonate, 2.45 g (5 mmole), 4,4'-difluorodiphenylsulfone, 3.81 g (15 mmole) were added to the mixture, which was heated to 150°C. to distill off the toluene and continue the reaction for 9 hours at this temperature. After allowed to cool, the mixture was added dropwise to a large quantity of hydrochloric acid to yield a precipitate, which was filtered to recover. Water washing and filtering of the precipitate were repeated until the washing liquor became neutral. The precipitate was dried under vacuum to yield 8.60 g of the polymer electrolyte. (The subscript in each repeating unit in the random copolymer, 0.38, 0.26, 0.12 and 0.24, indicates the mole ratio in the composition.) The results in the measurements of various physical properties for this polymer are given below. The permeability coefficient for methanol is given in **Table 2** ~~Table 1~~.

Please replace paragraph number [0204] with the following rewritten paragraph:

[0204] 2,7-Dihydroxynaphthalene, 0.61 g (3.8mmole), bisphenol A, 3.69 g (16.2 mmole), potassium carbonate, 2.90 g (21 mmole), dimethylsulfoxide, 50 mL and toluene 50 mL were added with stirring to a flask equipped with a distillation column under an argon atmosphere. The mixture was then heated to 125°C. and kept at this temperature for three hours to azeotropically distil off the water with toluene in the system. After allowed to cool, dipotassium 4,4-difluorodiphenylsulfone-3,3'-disulfonate, 2.69 g (5.5 mmole), 4,4'-difluorodiphenylsulfone, 3.68 g (14.5 mmole) were added to the mixture, which was heated to 140°C. to distill off toluene, heated to 150°C. and continue the reaction for three hours at this temperature. After allowed to cool, the mixture was added dropwise to a large quantity of hydrochloric acid to yield a precipitate, which was filtered to recover. Water washing and filtering of the precipitate were then repeated until the washing liquor became neutral. The precipitate was dried under vacuum to yield 8.6 g of the polymer electrolyte. (The subscript in each repeating unit in the random copolymer, 0.36, 0.10, 0.14 and 0.40, indicates the mole ratio in the composition.) The results in

the measurements of various physical properties for this polymer are given below. The permeability coefficient for methanol is given in **Table 2** ~~Table 4~~.